DOCUMENT RESUME

ED 257 142 CS 504 393

AUTHOR Coker, Ray A.; Coker, Deborah A.
TITLE Rationale and Recommendations for the Development of a Social Skills Treatment Program for Communication Apprehension in the Physically Disabled.
PUB DATE Feb 85
NOTE 39p.; Paper presented at the Annual Meeting of the Western Speech Communication Association (Fresno, CA, February 16-19, 1985).
PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (120)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Communication Apprehension; Communication Disorders; Communication Skills; *Interpersonal Communication; *Interpersonal Competence; Nonverbal Communication; *Physical Disabilities; *Social Development; *Speech Communication; Verbal Communication

ABSTRACT

In exploring both the relationship between communication apprehension and physical disability and the impact these factors have on the interpersonal and social relationships of an individual, the need for an effective treatment program for communication apprehension in the physically disabled becomes apparent. While conditions leading to greater mobility and accessibility for physically handicapped persons improve, strategies for socially mainstreaming these individuals lag behind. Research has shown that either communication apprehension or a disability can cause debilitative communication and have negative social consequences. There is thus a need for social skills training for disabled individuals. While conditions leading to the ineffective communication situations of the visibly handicapped are extremely complex, a treatment program that includes training of verbal and nonverbal social skills would be extremely beneficial in developing overall confidence and communication competence in the physically disabled. The report also includes an 11-page list of references. (DF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED257142

STUDENT DEBUT

RATIONALE AND RECOMMENDATIONS FOR THE DEVELOPMENT OF A SOCIAL SKILLS TREATMENT PROGRAM FOR COMMUNICATION APPREHENSION IN THE PHYSICALLY DISABLED

RAY A. COKER

and

DEBORAH A. COKER

Doctoral Candidates
Department of Speech Communication
University of Arizona
Tucson, Arizona 85721

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Deborah Coker

Ray A. Coker

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS 504 893

This paper explores the relationship between communication apprehension and physical disability and the impact these factors have on the interpersonal and social relationships of an individual. Literature related to the areas of reticence and the behavior of the visibly handicapped is reviewed and a rationale for a social skills treatement program is suggested. Recommendations entailing the training in both verbal and nonverbal skills are given which lead toward the development of overall communication competence in physically disabled individuals.

Over the past several years, numerous studies have been done concerning individuals who experience an inordinant amount of fear and anxiety about oral communication. Scholars describe this reluctance to communicate using varying terminology which includes: communication anxiety (Brownell and Katula, 1984; Fremouw and Harmatz, 1975; Friederich, 1970; Giffin and Bradley, 1969), reticence (Lustig, 1977; Lustig and King, 1980; Phillips, 1968, 1977), unwillingness to communicate (Burgoon, 1975, 1976; Burgoon and Burgoon, 1974), shyness (Zimbardo, 1977), and communication apprehension (Beatty and Behnke, 1980; McCroskey, 1970, 1977, 1977). Though differing epistomological positions have given rise to multiple models and treatment approaches for this construct, there is general agreement that there are cognitive, affective and behavioral manifestations of communication anxiety which can be assessed and that in general, as Lustig and King (1980) put it, "some people are more fearful than others in social-communicative interaction" (p. 74). The purpose of this paper is not to discuss the etiology of communiation apprehension nor its psychological results, rather it is to investigate the existence of reticence in a particular population of individuals, the physically disabled, and to offer a rationale and some recommendations for a social skills training program specifically taylored to the needs of this group.

The reader's own experience will probably lend support to the notion

that during the last decade physically disabled persons have begun interacting more frequently in social contexts. The absorption, or mainstreaming, of the visibly handicapped into society is evidenced by the appearance of wheelchair ramps, handicapped parking spaces and toilet stalls, specially designed bus accomodations, automatic doors in public buildings and wheelchair access signs. The current status of the disabled person can be directly related to the passage of the Vocational Rehabilitation Act of 1973 which sought to integrate the handicapped person into the mainstream of society. Amendments to the act in 1978 specifically forbid discrimination based on handicaps in either employment or in any program receiving federal funding. In 1975, with the enactment of Public Law 94-142 by Congress, handicapped children have been guaranteed the right to a free appropriate public education in the least restrictive environment (Shanker, 1980).

While conditions leading to greater mobility and accessibility for physically handicapped persons improve, strategies for socially mainstreaming these individuals lag behind. In the case of handicapped children, Gresham (1981) notes that a "common assumption by federal, state and local special education authorities is that physical placement of handicapped children in the presence of their nonhandicapped peers will result in increased mutual social interaction and social acceptance between the two groups" (p. 139). He goes on to say that this is not the case and that research has repeatedly demonstrated that nonhandicapped children interact very little with mainstreamed handicapped children. Gresham (1981) advocates social skills training for the handicapped to facilitate more productive and meaningful social relationships by increasing the number of positive interactions and reducing the number of negative ones.

It is the position of the authors that providing physically disabled persons with specific verbal and nonverbal communication skills would aid in successful mainstreaming efforts on personal, social and academic levels. Such communication skills may be conceptualized as a part of a broader construct known as communication competence, an area of interest to persons involved in investigating communication apprehension (Cupach and Spitzberg, 1983; Glaser, 1979; Glaser et al., 1979; McCroskey, 1982; Phillips, 1968, 1977; Phillips and Metzger, 1973; Spitzberg, 1981, 1983; Wiemann, 1977). The application of research findings and development in the area of communication competence can be appropriately applied to the study of social behavior in the physically disabled. Extensive research with both communication apprehensives and the visibly handicapped has produced similarities in such categories as: individual behavior, perception of the self, social and communication interaction patterns, and behavior and perceptions of others toward a focal individual.

Table 1 provides a summary of a review of literature on communication apprehension and disabled communicators. A cursory examination of this table reveals that either of these conditions cause debilitative communication and have negative social consequences. This research suggests that the major characteristics of oral communication apprehension which lead to dysfunctional social interactions can be applied to the physically disabled who suffer from social skills deficits. Lustig and King (1980) state that apprehensive people: (1) vary in their apprehensiveness about oral communication with others, (2) often avoid social situations that would require oral communication and remain relatively silent when involved in them (Daly and McCroskey, 1975; McCroskey and Andersen, 1976; Sorensen and McCroskey, 1977; Weissburg and Lamb, 1977), (3) when communicating, perceive

TABLE 1

SUMMARY OF RESEARCH FINDINGS RELATED TO PERSONAL, SOCIAL AND EMPLOYMENT FACTORS FOR HIGHLY APPREHENSIVE COMMUNICATORS AND DISABLED INDIVIDUALS

Highly Apprehensive Communicators

Results	Year	Author(s)
Less direct eye contact	1984	Burgoon and Koper
	1976	McCroskey
Less likely to exhibit socially appropriate behavior in a given situation	1978	Larson, Backlund, Redmond and Barbour
Less facial expressiveness and less facial pleasantness	1984	Burgoon and Koper
	1976	McCroskey
Less gesticulation	1976	McCroskey
	1975	Saine, Levine and McHose
Less prolonged eye contact	1976	McCroskey
Less random movement	1984	Burgoon and Koper
Less likely to receive a job interview	1976	Daly and Leth
Less likely to receive a job	1976	Daly and Leth
	1977	Richmond
Less likely to seek advancement that would increase communication requirements	1978	Scott, McCroskey and Sheahan
Less verbal productivity	1976	Burgoon
	1971	Murray
	1962	Fenz and Epstein
	1959	Mahl
Lower college GPA's	1976	McCroskey and Andersen
	1976	Scott and Wheeless
Lower standardized test scores	1971	Bashore
	1976	McCroskey and Andersen
Lower grades in some classes in junior high school	1976	Hurt, Preiss and Davis
More backward lean	1984	Burgoon and Koper
More intruding incoherent sound	1959	Mahl
More repetitions	1964	Miller and Hewgill
	1959	Mahl
More self-touching and adaptive behaviors	1984	Burgoon and Koper
	1982	Miller and Burgoon
More sentence changes and incompletions	1959	Mahl

TABLE 1—*Continued*

Results	Year	Author(s)
More stuttering	1959	Mahl
More vocal nonfluencies	1978	Siegman
	1976	Freimuth
	1972	Siegman and Pope
	1964	Miller and Hewgill
	1959	Mahl
Perceived as less relaxed and dominant in their metamessages	1982	Porter
Perceived as significantly more listless and nervous	1942	Gilkinson
Perceived less competent as communicators	1979	Jablin and Sussman
	1977	Powers
	1970	Wells and Lashbrook
Perceived less favorably by others	1976	Fenton and Hopf
	1976	Freimuth
	1976	McCroskey and Richmond
	1977	McCroskey et al.
	1972	Quiggins
Prefer jobs with lower frequency of interaction; willing to maintain less status and economic reward	1978	Scott, McCroskey and Sheahan
	1975	Daly and McCroskey
Significantly faster speaking rate	1978	Siegman
	1976	Argyle
Disabled Individuals		
Avoided	1965	Farina and Ring
Blamed for nonexistent failings and held reponsible for other's mistakes	1968	Farina, Sherman and Allen
Children rarely verbal actors but rather receivers with communications coming from teachers not peers	1980	Erickson and Omark
Children interacted with little by nonhandicapped children and poorly accepted by peers	1978	Bruininks
	1974	Bryan
	1977	Morgan
	1974	Ray
Given fewer interviews with personnel agencies	1976	Johnson and Heal
Have difficulty developing communication competence	1981	Thompson
	1983	Thompson

TABLE 1—*Continued*

Results	Year	Author(s)
Interactions shorter than between two nondisabled individuals	1967	Bord
	1968	Farina et al.
	1966	Kleck et al.
Judged inferior	1963	Goffman
	1960	Wright
Less likely to be accepted as marital partners	1974	Jones
Less likely to be selected as friends or colleagues by able-bodied	1970	Richardson
Many nonhandicapped avoid interactions with handicapped	1968	Farina et al.
	1965	Farina and Ring
Nonhandicapped exhibit more constrained behavior when with handicapped	1968	Kleck
	1969	Kleck
Nonhandicapped expresses opinions less readily with handicapped	1966	Kleck et al.
Nonhandicapped maintain greater distance with handicapped	1968	Kleck
	1969	Kleck
	1966	Kleck et al.
Nonhandicapped reactions often unfavorable; feelings of uncertainty, discomfort, anxiety	1965	Farina and Ring
	1966	Yuker
	1961	Richardson et al.
Nonhandicapped show less movement when handicapped	1966	Kleck et al.
Perceived as more reserved, alienated introverted and defensive	1969	Titley
	1960	Wright
Perceived as less competent and poor workers	1965	Farina et al.
	1966	Farina et al.
Possible negative effect on self-concept	1975	Blumberg
	1977	Clifford and Brantley
	1965	Craig
	1967	Meissner, Thoreson and Butler

themselves and are perceived by others more negatively than individuals who are less reticent (McCroskey and Daly, 1976; McCroskey et al., 1977; McCroskey and Richmond, 1976), and (4) are perceived as less competent as the result of communication interactions than less reticent individuals (Jablin and Sussman, 1978; Powers, 1977).

The studies cited in Table 1 support the postulate that many physically diabled persons are treated by others in a manner similar to that of reticent persons and are often apprehensive about communicating and in need of training. MacKenzie, Marquardt and Werkman (1981) write that "discomfort is common in many interactions between able bodied and visibly handicapped individuals. Often behaviors emitted by the able bodied cause stigmatization and isolation of the disabled which tends to reduce their self-concept and esteem" (p. 1). The acceptance of a communication and relational orientation by persons dealing with the physically disabled allows recent contributions and advancements in such areas as communication apprehension as well as treatment approaches and methodology to be applied to rehabilitation situations and other communication-intensive contexts.

Prior to consideration of a treatment program for those disabled individuals that may be apprehensive about oral communication, it is necessary to discuss the construct communication competence. Wiemann (1977) describes this notion as "the ability of an interactant to choose among available communication behaviors in order that he may successfully accomplish his own interpersonal goals during an encounter while maintaining the face and line of his fellow interactants within the constraints of the situation" (p. 198). Phillips (1977) proposes a definition of successful communication in rhetorical terms, similar to this, "...rhetoric is the conscious deployment of the spoken word to attain goals. In doing rhetoric, a person seeks, consciously,

to alter the behavior of someone else" (p. 39). Thus, according to Phillips, a competent communicator is one who can identify the person or persons to be modified by the use of speech, analyze the constraints and restraints of a given situation, and adapt his/her language to influence or alter the behavior or thinking of the other toward a predetermined goal.

Those constructs defined and argued by Spitzberg (1983) as falling under the rubric of communication competence are motivation, knowledge, skills and impression. He argues that competence should be measured by obtaining the individuals' view of his/her own communication appropriateness and effectiveness in a particular episode. This departs from McCroskey's (1982) view that individuals can be referred to and labeled as "competent" or "incompetent." Physically disabled persons may indeed be competent when interacting with close friends or family, however, much evidence supports the the fact that these communicators are less competent in particular episodes wherein they do not possess the appropriate knowledge or skills to interact effectively.

Many variables impact upon a communicative situation to bring about positive outcomes. Among the contributing factors to a successful interchange that are noted by Lustig and King (1980) are: social sensitivity, utilization of feedback, interaction management and empathy (p. 75). On a fundamental level, a competent communicator must then possess an adequate repertoire of social skills and have the ability to choose strategies which are situationally appropriate and beneficial. Unfortunately, rehabilitation literature on disabled persons asserts that many such individuals do not have the necessary skills to carry out positive social and interpersonal interactions (Gresham, 1981; Goldberg, 1981; Hurt and Cook, 1979; Ibrahim and Herr, 1982; Russell, 1981; Thompson, 1981a, 1981b, 1983; Thompson and Seibold, 1978).

From the outset of an interaction a person with a visible physical disability is typically at a disadvantage (Kleck, 1968). In his book, *Stigma: Notes on the Management of Spoiled Identity*, Goffman (1963) argues that deviations from normality lead to unfortunate interpersonal consequences; any alteration from normal appearance, behavior, or experience is stigmatizing. Weinberg (1978) posits that while the basis for negative attitudes and behavior toward the disabled is not well understood, theories do suggest that discrimination occurs because the disabled are viewed as being different from the able-bodied.

Fontes, Miller and Kaminski (1977) identify the problem occurring between physically handicapped and nonhandicapped interactants as "strain in social interaction." According to these investigators, "This strain results from participants' attitudes toward one another as well as not knowing the most appropriate communication strategy for maximizing the transactional quality of these interactions" (p. 6). Siller et al. (1967) determine that the strain is caused by uncertainty on the part of the physically normal person as to whether or not to take notice of another's disability. Similarly, Kleck (1968) hypothesized that discomfort would be experienced by high school subjects when they encountered a physically disabled person and would result in a decrease of eye contact by subjects, when contrasted with eye contact with an able-bodied peer. Kleck's eye contact hypothesis was not confirmed, however, he did find that subjects tended to look longer and move less when interacting with apparently disabled communicators. Kleck (1969) later wrote that an individual's physical disability produces "distorted" behavior in an able-bodied person during an interaction, a possible explanation being that in such situations, the able-bodied person desperately seeks information which might suggest the proper mode of behavior rather than avoiding eye

contact with the disabled individual. Such research clearly suggests that physically disabled and able-bodied interactants often feel the interaction anxiety Hurt and Cook (1979) wrote of which inhibits communication.

Whether dysfunctional communication between the visibly handicapped and nonhandicapped person is due to the disabled individual's: (1) actual physical limitations, (2) mental or emotional attitude about communication, (3) reaction to stigmatization and uncertainty exhibited by the able-bodied person, (4) communication anxiety or lack of confidence, and/or (5) lack of necessary communication strategies to appropriately adapt to situations, the issue of concern here is that ineffective communication often occurs between these parties and hinders successful interpersonal and social relationships, particularly on the part of the physically disabled.

In Phillips' (1977) discussion of rhetoritherapy, he stresses the fact that causes are not important to the teaching of behavior change in persons who believe they have problems communicating with others. He deems that regardless of the etiology of the problem, without communication skills a person has little influence on the behavior of others, receives few rewards from their social environment and furthermore, that skill acquisition seems to improve self-perceptions. Thompson (1981a, 1981b) feels that repeated unfavorable reactions by others negatively affects the visibly handicapped person's self-concept as well as his or her development of communicative competence and has therefore developed a communication skills training program for handicapped children.

Gresham (1981) cites eight different studies which indicate that handicapped children do not vicariously acquire social skills by observing nonhandicapped models unless they are instructed, trained or reinforced for doing so (p. 139). He further notes that much of the research concerning

social acceptance and social interactions of mainstreamed handicapped children gives evidence that their behavior in regular classrooms results in negative or punishing consequences. Gresham's (1981) belief concerning the lack of acceptance of the handicapped child by their nonhandicapped peers is that these children are poorly accepted because of social skills deficencies.

In Goldberg's (1981) article "Toward an Understanding of the Rehabilitation of the Disabled Adolescent" he discusses similar difficulties experienced by handicapped youth. Persistent clinging to the family, loss of affect in peers, social withdrawal, passivity and reluctance to communicate are among the disorders found in disabled youth. "The concerns of adolescents extend beyond the development of educational and vocational skills. Yet few programs emphasizing the development of social skills are avilable to them" (Goldberg, 1981, p. 70).

Individuals who have become disabled through an accident or disease often go through stages of adjustment to their handicap. These are reported as: a) initial shock, b) retreat or denial, c) grief, mourning or depression, d) reactions against dependency which include separation anxiety, assertion, and aggression, and e) eventual adjustment based largely upon acceptance of the disability and renewed life involvements (Russell, 1981). Means and Akridge (1978) determine that a person that has difficulty adjusting to a disability is one who does not use basic verbal and nonverbal communication skills to attend, recognize, and report affective and cognitive perceptions and interpretations of themselves, others and the world around them. To these researchers, the healthy, adjusted person is one who communicates an overall purpose which includes acting constructively in maintaining open facilitative relationships with others and a persistent conceptualization

of self, others and the world.

The research cited has given documentation for the need for social skills training in disabled individuals. A further illustration of the suggested relationship between communication apprehension and the physically handicapped is given in Figure 1. The top portion of the diagram (*Section* A) portrays the approach taken by many scholars. In this case, ineffective communication is seen to be caused by a reluctance to communicate or anxiety when communicating; this problem results in negative social and personal consequences for the individual and is treated by one of three treatment methods given (Glaser, 1981, 1982). The case of the physically disabled individual is shown in *Section* B where ineffective communication with others occurs and is attributed to the physical handicap (Davis, 1961; Erickson and Omark, 1980; Farina et al., 1968; Goffman, 1963; Goldberg, 1981; Gresham, 1981; Hurt and Cook, 1979; Kleck, 1966, 1968, 1969; Thompson, 1981a, 1981b) rather than as the result of communication apprehension or other communication behaviors. Once negative personal and social consequences are experienced and reported by a disabled individual, treatment is usually through counseling of mental and emotional problems and attitudes, educational rehabilitation or vocational rehabilitation (Cook et al., 1981; Fontes et al., 1977; Goldberg, 1981). *Section* C illustrates the position of the authors as the physical disability is seen to cause communication apprehension which in turn causes ineffective communication and results in negative personal and social consequences. The most effective treatment for this problem is not only counseling and rehabilitation, but also social skills training with an emphasis on verbal and nonverbal communication skills.

As with any model, there are problems associated with isolating a particular behavior or set of behaviors that contribute to an overall process like communication, yet such schemes are beneficial for the exploration of rel-

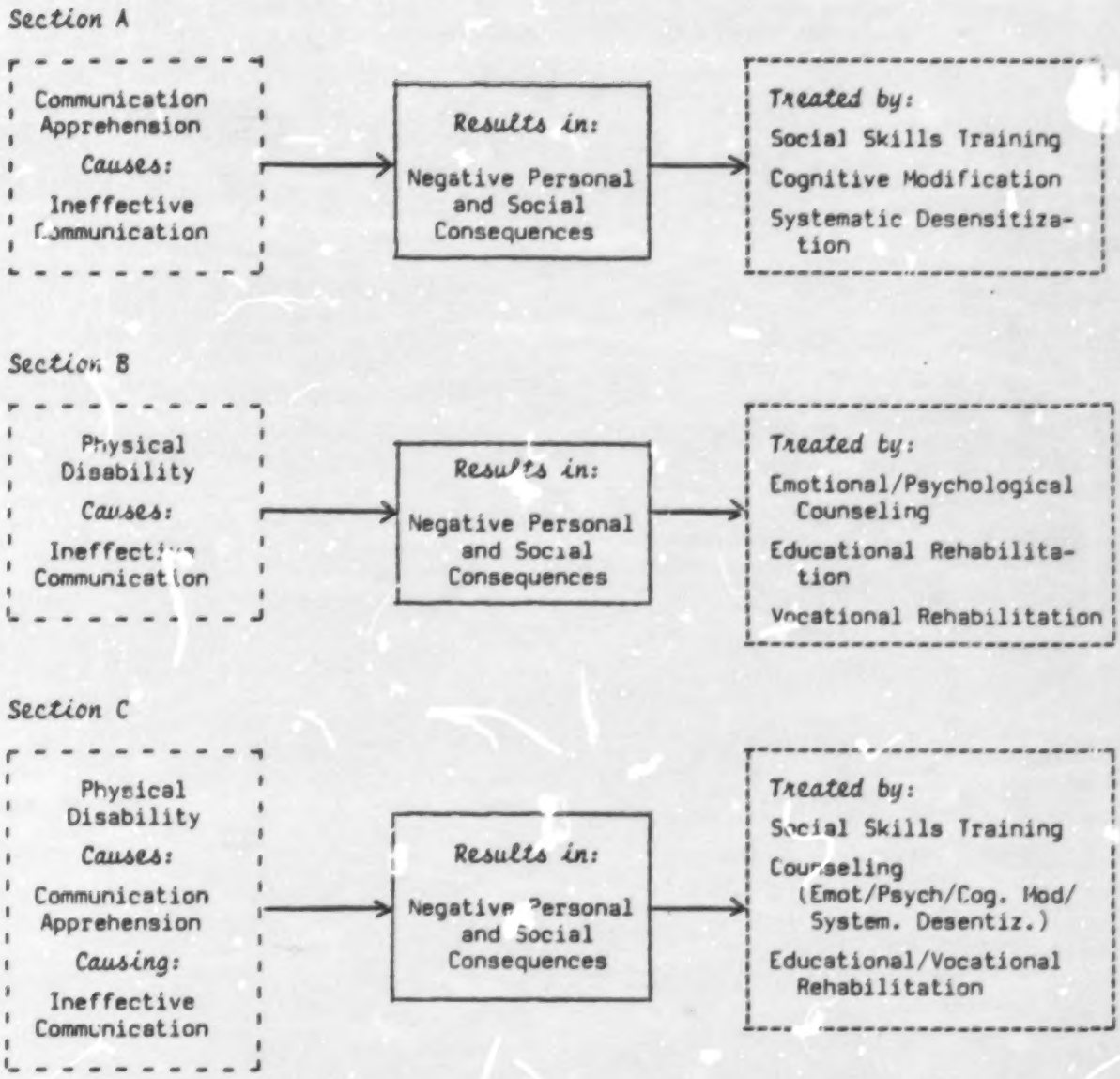

Figure 1. Analysis of causes of ineffective communication, the results, and treatment procedures.

ationships and ideas and may produce insights not previously determined. In the preceeding example, the first two approaches to diagnosis and treatment emphasize either a state or physical condition; the third approach integrates these aspects positing that the physical condition causes the state and has certain repercussions and then shows an integrated treatment plan providing individuals with social skills training as well as mental, emotional and behavioral adjustment strategies.

Though there is no research, known to the authors, that specifically states that physically disabled persons are reticent, the previous discussion shows that many charactertisic commonalities exist between reticent communicators and physically disabled individuals that may also suffer from communication apprehension. To summarize this portion of the project before commensing discussion on recommendations for a social skills treatment program or the visibly handicapped, the research previouslv reviewed leads to the following generalizations about the communication of disabled persons:

1. Dysfunctional communication often occurs between able-bodied and disabled persons as a result of interaction anxiety and strain.

2. Physically disabled persons often perceive themselves as inadequate and stigmatized as the result of interactions with others and develop negative self-concepts and low self-esteems which, in turn, limits their desire to communication and subsequent gaining of communication competence.

3. Nonhandicapped persons interact less with handicapped persons than with others in their environment and often feel ill-at-ease doing so; their communication is 'distorted' as nonverbal behavior is restricted and verbal behavior is overcontrolled.

4. Many scholars and clinicians that work with disabled children, adolescents or adults have expressed a need for social skills training for the development of communication competence and greater social acceptance and integration of these individuals.

The following section is a series of recommendations for a social skills treatment program based on this research of communication apprehension and the physically disabled.

RECOMMENDATIONS FOR THE DEVELOPMENT OF A SOCIAL SKILLS TREATMENT PROGRAM FOR COMMUNICATION APPREHENSION IN THE PHYSICALLY DISABLED

Throughout this paper the terms physically disabled, disabled, visibly handicapped and handicapped have been used. While these terms can apply to a number of illnesses and mental or physical disabilities, for the purpose of practicality, the treatment program under consideration is directed toward the spinal cord injured that are paraplegic or quadriplegic. By way of definition, a paraplegic is a person with the loss of motion and sensation in the lower extremities; a quadriplegic is loss of motion and sensation involving both lower and upper extremities (Brunner and Suddarth, 1974). The causes for these conditions are trauma (automobile and motorcycle accidents, diving and surfing injuries, gunshot wounds) or diseases (multiple sclerosis, cerebral palsy, tumors, infections). The psychological significance of the disability lies in the acceptance of it which leads to the development of realistic goals for the future or rejection of the disability which brings about a need for psychiatric assistance (Brunner and Suddarth, 1974).

When a person becomes permanently physically disabled their ability to respond with behaviors that previously were physically possible is severely altered; as a result, the conditioned and unconditioned responses and reinforcers or stimulus consequences experienced by the person prior to disablement are no longer operative (Goldberg, 1981). Adjustment to a disability is difficult; "loss and change of sufficient magnitude produce crises threatening one's psychological equilibrium" (Russell, 1981, p. 330). A person's ability to learn new reinforcers and behaviors ultimately affects how well he/she will adjust and gain rewards and satisfactions from relationships

and environment.

One of the major obstacles faced by physically disabled persons is a lack of self-esteem. Interactions with others often produce negative consequences and cause such persons to avoid communication situations (Fontes et al., 1977; Goffman, 1963; Hurt and Cook, 1979; Thompson, 1981b). The need for social skills training for the visably handicapped has been previously discussed; due to the complexity and multidimensionality of the process of communication, it is determined that both verbal and nonverbal skills should be taught. If either verbal or nonverbal skills were taught in isolation of the other, the training for a disabled individual would be less adequate in terms of the overall dynamic and systemic properties of communication.

A social skills treatment program for the spinal cord injured individual involving the aspects that will be recommended in the following could be implemented in such organizations as: the Rehabilitation Institute of Oregon (RIO), the Handicapped Information Program (HIP), the National Spinal Cord Injury Association, the Independent Living Program, Handicapped Student Services, or the United Cerebral Palsy Association.

Training of Verbal Behaviors

In training persons in verbal behavior toward communication competence, an existing program, developed by Glaser, Biglan and Dow (1979) is deemed workable and appropriate. This "Conversational Skills Treatment Program" is based on a skills deficit model which views people who perform poorly in social interactions as doing so because of an inadequate behavior repertoire. The lack of requisite skills is addressed in the program by targeting seven verbal behaviors and teaching people to perform these. The behaviors in the program presently include: asking questions, initiating and maintaining

conversations, paraphrasing, agreeing, disagreeing, giving and receiving compliments and asking for behavior change. These skills provide trainees not only with interrelated skills but also the behavioral flexibility to manage them appropriately and effectively (Glaser, 1979; Glaser et al., 1979). The skills are taught through direct instruction, coaching of target behaviors, modeling, goal setting, covert rehearsal, behavior rehearsal, *in vivo* practice and self-monotoring. Implementation of this program has proved worthwhile as students emerge more skilled socially and conversationally as a result of the training (Thomas, 1978).

In addition to these seven targeted behaviors, other verbal skills particularly relevant to the physically disabled include: self-disclosure about the disability, requesting reassurance and emotional support, and "breaking through" techniques.

Self-disclosure about the disability is a strategy for minimizing the strain often present in *normal*-stigmatized interactions. Research done by Thompson and Seibold (1978) indicates that such self-disclosure positively affects uncertainty, tension and attraction when used and may lead to greater acceptance of the stigmatized person by the *normal* (although the latter has not been empirically proven at this time). Extensive research on self-disclosure suggests that many variables contribute to successful disclosure and receptingand it can often bring about positive outcomes and social rewards. Specifically, studies indicate that when used effectively, self-disclosure results in greater attraction toward the discloser, increased intimacy and mutual disclosure between interactants, and relational satisfaction when the disclosure is perceived as socially rewarding and situationally and relationally appropriate (Bochner, 1982; Derlaga, 1976; Jourard, 1959, 1971; Pearce, 1974; Rosenfeld, 1979; Wheeless, 1978; Worthy et al., 1969).

The sharing of thoughts or feelings by an individual about his/her disability is also seen to imply "progressively binding legitimation" of the relationship (Davis, 1961). Straightforward conversational offerings in which the disabled person makes reference to the disability indirectly let the able-bodied person know that the former does not take offense at the latter's uneasiness or regard it as an obstacle in achieving rapport.

Developing the skill of disclosing about a disability potentially limits the strain on a relationship, particularly in the initial stages of initiating, experimenting and intensifying (Knapp, 1984). Initially, communicators try and reduce uncertainty about another before the other is 'cleared' for an encounter. Often disabled persons never get the initial clearance because of stigmatization, if they do, disabled individuals should be encouraged to self-disclose about the disability so that uncertainty on the part of the able-bodied can be reduced. In the experimenting stage of a relationship, individuals try to discover the unknown about the other. Knapp claims that the function of this stage is to (1) uncover integrating topics and openings for more penetrating interactions, (2) test a possible future relationship or increase the scope of the current relationship, (3) provide a context for revealing who we are and how another can know us better, and (4) allows for the maintenance of a sense of community with others (p. 36). In the intensying stage, individuals tend to increase the personal disclosures and deal more directly with the development of the relationship. Several indicators are commonly exhibited at this phase among which are more direct expressions of commitment, sophistication in nonverbal message encoding and decoding and shared assumptions and verbal shortcuts. If the disabled individual can be trained in the developing of interpersonal relationships according to

the stages of a relationship and appropriate levels of self-disclosure a more balanced view of the needs, desires, cognitive and affective processes of the disabled individual could be promoted.

Requesting reassurance and emotional support involves the ability on the part of a physically disabled individual to express his/her needs. Russell (1981) determines that in order for a physically disabled person to preserve a reasonable emotional balance and satisfactory self-image, must acquire this 'coping skill.'

In Thompson's (1981) work on the impact a physical handicap has on communication characteristics in a marital dyad, she notes that in order to maintain a satisfactory relationship after the onset of a disability, there must be a sharing and interdependence of partners which includes mutual empathy, mutual exchange of thoughts and communication of a wide range and intensity of feelings. Specific skills training in the expression of the need for reassurance and emotional support in the most appropriate and suitable manner is necessary for the disabled individual's maintenance of a high level of self-esteem as well as a high level of positive interaction rewards.

"Breaking through" techniques are methods utilized by a visibly disabled person to reduce the perceptual biases or stereotypes an able-bodied person may hold. MacKenzie et al. (1981) believe that whenever there is strained interaction between an able-bodied and a physically disabled, the burden is placed on the disabled individual to keep the communication flowing smoothly and comfortabl (p. 3). Kleck (1968) further discusses the fact that the physically stigmatized person "will elicit from the social environment behavior which are consistently inhibited and overcontrolled" (p. 19). Given these factors, a physically disabled person will facilitate more productive transactions by

striving to reduce the threat posed by their visible handicap and inducing others to respond to him/her as they would to a *normal*.

Many studies have revealed the notion that we like those people that we can identify with and that are similar to ourselves. One way for a disabled person to "break through" is to allude in passing to his/her involvement in a normal round of activities. This allows for the narrowing of the fictional gap of attributions between interactants and enhances more spontaneous forms of expression (Davis, 1961). Through briefings, a physically disabled person can note similarities between him/herself and others and provide their partner in an intersction with alternative information to alter any negative perceptions or interpretations they may hold. "Breaking through" techniques are seen as critical in the behavior repertoire of individuals in social skills training.

These three verbal skills are additional behaviors viewed as essential in the reduction of dysfunctional communication and overall development of communication competence in the physically disabled. To foster the most successful communication outcomes, the "Conversational Skills Treatment Program" (Glaser et al., 1979) and these added verbal behaviors should be implemented utilizing the following recommendations on the development of nonverbal communication skills in the visibly disabled.

Training of Nonverbal Behaviors

The recommendations for the training of nonverbal behaviors for the spinal cord injured person shall be in the following areas: facial expressions, eye behavior, posture and body movements, physical appearance, touch and proxemics. Though many persons, disabled or non-disabled are unaware of the whole realm of nonverbal communication, the axiom 'one cannot not communicate' (Watzlawick, Beavin and Jackson, 1973) provides a basis for studying this com-

ponent of communication. In that nonverbal communication makes up some 55% of the total impact of a message (Mehrabian, 1973), it is resolved that this is an essential area in the overall functioning and development of communication competence.

Facial Expressions

The face is capable of making hundreds of distinct movements and is the primary signal system for showing the emotions (Ekman and Friesen, 1975). Those emotional states shown on the face which have been uncovered by virtually every researcher since 1940 are: surprise, fear, anger, disgust, happiness, and sadness (Knapp, 1978). Two aspects of significance for the disabled person have been engendered by research on facial behavior. First, the visibly handicapped person must be made aware of his/her own facial affect. In that the face is the primary site for communication of emotional states, it reflects interpersonal attitudes and provides nonverbal feedback on the behavior or comments of others. Positive facial affect in both sending and receiving messages invites further interaction by complimenting or qualifying verbal or nonverbal messages while neutral or negative facial affect may be interpreted as closing communication channels.

The second, more important, result of the research on the face has to do with the combinations of emotions, called blends. There are approximately 33 different blends which can occur when people feel two emotions at once: while the eyes may manifest disgust, the lower face may manifest happiness, and a blend is created (Ekman and Friesen, 1975). Often when able-bodied persons interact with disabled individuals their face portrays blends as they try and "mask" one emotion with another (Grove, 1982). The result of masking is a facial blend yet most of the emotion still comes through on the face and can be decifered. A disabled person who can recognize the masking

process can use this as information about the feelings of the other and can learn to put him/her at ease through other verbal or nonverbal techniques.

Eye Behavior

Goffman (1967) introduces the term "civil inattention" in his work on interaction rituals as the behavior exhibited by persons which conforms to strict cultural norms. Walking toward someone, establishing brief eye contact, dropping your eyes within a specified distance and continuing to walk, is an example of this concept. MacKenzie, Marquardt and Werkman (1981) report that often cultural norms for eye behavior are not practiced with the physically disabled person as he/she is seen as either 'fair game,' and is open for staring, or is 'nonexistent' and ignored by the lack of any visible glance or eye contact. In either case, inappropriate social behavior is expressed through eye behavior and often the disabled person will implement a defense mechanism and avoid or severely limit their eye contact as a result (Kleck, 1966).

Training visibly stigmatized persons in eye behavior could begin with reorienting them to appropriate eye contact. Research provides the following information on eye behavior: (1) eye contact is an important index of proxemics (Hall, 1963), (2) eye contact decreases as closeness increases (Argyle and Dean, 1965), (3) visual contact occurs when we want to signal that the communication channel is open (Knapp, 1978), (4) more eye contact is typically associated with more positive attitudes between communicators (Exline, 1963; 1965), and (5) gazing and mutual gazing are often indicative of the nature of the relationship between two interactants (Knapp, 1978). Characteristics such as these can be learned and practiced to promote positive interactions and aid in the creation and maintenance of confidence and self-esteem in physically disabled individuals.

Posture and Body Movements

A crucial area in the social skills treatment of physically disabled individuals has to do with their posture and body movements. In most spinal cord injury cases, both of these aspects are severely limited and a person must relearn how to most effectively use them in communicating. Training in these areas may provide some techniques and strategies which may be beneficial.

In one study, Goffman (1967) observed that tension (rigid body posture) was more apparent in low-status interns than in higher-status psychiatrists at staff meetings. This observation led to a belief that higher-status people generally appear more relaxed. A relaxed posture, according to Mehrabian (1972) consists of asymmetrical arm positions, sideways lean, asymmetrical leg positions, hand relaxation and backward lean. Though much of the leg and hand movements are restricted in paraplegics and quadriplegics, the positioning of the legs in a wheelchair or seat that indicates a relaxed position will make them seem more at ease. Hand movements as well as forward, backward, and sideways leans should be encouraged as an indicator of relaxation. Ekman and Friesen (1975) support this position noting that stationary facial expressions and postures tend to communicate gross affect of intensity of emotion in contrast to body or facial movement which communicates specific emotion and deintensifies the emotion.

The notion of immediacy, which includes: touching, close distance, forward lean, eye contact, and direct body orientation, led Mehrabian (1972) to develop a hypothesis that the "immediate postures and positions of a communicator are associated with his/her greater liking of the addressee and lead the addressee to infer that the communicator likes him/her more" (p. 18). These concepts of communicating relaxation through body movements and posture

and nonverbally emphasizing liking through posture and body positions are significant for the person with a limited repertoire of physical behaviors to draw upon; their utilization can enhance successful interactions.

Physical Appearance

Although most of us have grown up with the golden rule that 'inner beauty is what really counts' research suggests that outer beauty, or physical attractiveness, plays an influencial role in determining responses for a broad range of interpersonal encounters (Knapp, 1978). Knapp (1978) states that "appearance and dress are major factors contributing to how others judge your personality, your sexuality, your popularity, your success, and often your happiness" (p. 186). Experts also submit that initially we respond much more favorably to those perceived as physically attractive than those seen as less attractive or ugly (Mehrabian, 1972).

Implications from such research can be used to the benefit of the physically disabled individual in their consideration of clothing, artifacts or hair styles. While paraplegics have the use of their upper extremities and can dress themselves and make their appearance as attractive as possible, quadriplegics depend on others to a great extent to dress them, comb their hair, bath them and even pick out their clothes. Great care should be taken with the use of clothing as it can enhance or detract from the nonverbal messages that are emitted by a person. Since people feel more comfortable with those that are similar to themselves, disabled persons should be encouraged to wear clothing that makes them look similar to able-bodied persons in fashion and design. Appearance and dress are part of the total nonverbal stimuli which influence interpersonal responses and often primarily determine such responses (Knapp, 1978). Appropriate consideration should thus be taken in this area to project as attractive and positive image as possible.

Touching Behavior and Proxemics

One of the complaints often expressed by disabled, wheelchair bound persons is that they are the recipient of far less touch than is their chair (MacKenzie, 1981). Touching, something most able-bodied people take for granted, can express: encouragement, tenderness, emotional support and affection. The greater the emotions, the closer the perceived the relationship, the more change of touching (Fisher et al., 1976). In a society that inhibits touch, reaching out to a person sitting in a wheelchair is even more difficult. Even though the disabled person's own personal space may be smaller, it is frequently perceived by the public as larger, encompassing the chair. The last few inches past the chair can seem miles psychologically for an able-bodied person to reach out and touch a disabled person (MacKenzie et al., 1981). In many cases, the main type of touch a disabled person receives is help in and out of bed; emotionally unmeaningful contact.

Often people who are touched respond with touching behavior (Knapp, 1978). Teaching a disabled person to initiate touch may stimulate and facilitate reciprocal touching behavior. In order to satisfy this physical and emotional need, the most effective way to handle this nonverbal behavior is to request it verbally or nonverbally. In the same manner, many people in wheelchairs also assert that able-bodied individuals stand too far away from them and it is uncomfortable for a personal conversation. Hall (1966) has distinguished four communication zones for North Americans which include a 1½ to 4 foot zone for personal communications and a 4 to 10 foot zone for social-consultive communications. Interactants with visibly handicapped persons tend to stand at the outside limits of these distances causing feelings of being stigmatized in the disabled (Kleck, 1966). The training of wheelchair bound individuals should include

an emphasis on moving toward the communicant in an unobtrusive manner in order to facilitate more personal interaction and feelings of warmth. This could be done by approaching the person from the side so that the front portion of the chair does not inhibit communication.

Summary

Research does not specifically state that physically disabled persons are apprehensive communicators. It does suggest, however, that these individuals often: avoid social situations and communicative interactions and are negatively reinforced and punished when they do partake in them, have low self-esteem and perceptions of their own competence, and have problems in communicating with others, particularly the able-bodied.

As a result of a felt need for the investigation of these two areas of concern to many, a rationale was presented as a means of exploring the relationship between the two conditions. The conclusion was drawn that physically disabled individuals may indeed suffer from communication apprehension as they possess many of the characteristic concerns of reticent persons and experience the same consequences in their interactions.

While the conditions leading to the ineffective communication situations of the visibly handicapped are extremely complex, recommendations for a treatment program encompassing the training of verbal and nonverbal social skills have been proposed. Both the literature and persons interviewed by the author indicate that such a skills program would be extremely beneficial in developing overall confidence and communication competence in the physically disabled. As Davis (1961, p. 132) writes, "the visibly handicapped person must learn to sustain the breakdown and repair that is constantly occuring in their interactions throughout life"; such a treatment program may help facilitate this difficult task.

REFERENCES

Argyle, M. *The psychology of interpersonal behavior*. Baltimore: Penguin Books, 1967.

Argyle, M., and Dean, J. Eye contact, distance, and affiliation. *Sociometry*, 1965, 28, 289-304.

Bashore, D.N. Relationships among speech anxiety, IQ, and high school achievement. M.S. thesis, Illinois State University, 1971.

Beatty, M.J. and Behnke, R.R. An assimilation theory perspective of communication apprehension. *Human Communication Research*, 1980, 6, 319-325.

Bernstein, I.H. and Eveland, D.C. State vs trait anxiety: A case study in confirmatory factor analysis. *Personality and Individual Differences*, 1982, 3, 361-372.

Birk, T., Pfau, M. and Archias, S. Communication reticence, nonverbal behavior, and persuasion. Unpublished manuscript, Department of Speech Communication, University of Arizona, 1984.

Blumberg, M.L. Psychodynamics of the young handicapped person. *American Journal of Psychotherapy*, 1975, 29, 466-476.

Bochner, A.P. On the efficacy of openness in close relationships. In *Communication Yearbook 5*, M. Burgoon (Ed.), pp. 109-124. New Brunswick, New Jersey: Transaction, 1982.

Bord, R.J. The impact of imputed deviant identities in structuring evaluations and reactions. *Sociometry*, 1976, 39, 108-116.

Brownell, W.W. and Katula, R.A. The communication anxiety graph: A classroom tool for managing speech anxiety. *Communication Quarterly*, 1984, 32, 243-249.

Bruininks, V.L. Actual and perceived peer status of learning-disabled students in mainstream programs. *Journal of Special Education*, 1978, 12, 51-58.

Brunner, L.S. and Suddorth, D.S. *The Lippencott manual of nursing practice*. Philadelphia: Lippincott, 1974.

Bryan, T.S. Peer popularity of learning disabled children. *Journal of Learning Disabilities*, 1974, 7, 621-625.

Burgoon, J.K. Teacher strategies for coping with communication apprehension. Paper presented at the Speech Communication Association Convention, Houston, Texas, 1975.

Burgoon, J.K. The unwillingness-to-communicate scale: Development and validation. *Communication Monographs*, 1976, 43, 60-69.

Burgoon, J.K. and Burgoon, M. Unwillingness to communication, anomia-alienation and communication apprehension as predictors of small group communication. *Journal of Psychology*, 1974, 88, 31-38.

Burgoon, J.K. and Hale, J.L. A research note of the dimensions of communication reticence. *Communication Quarterly*, 1983a, 31, 238-249.

Burgoon, J.K. and Hale, J.L. Dimensions of communication reticence and their impact on verbal encoding. *Communication Quarterly*, 1983b, 31, 302-312.

Burgoon, J.K. and Koper, R.J.Nonverbal and relational communication associated with reticence. *Human Communication Research*, 1984, 10, 601-626.

Clifford, E. and Brantley, H.T. When I was born: Perceived parential reactions of adolescents. *Journal of Personality Assessment*, 1977, 41, 604-609.

Cook, D.W., Bolton, B. and Laperek, P. Rehabilitation of the spinal cord injured: Life status at follow-up. *Rehabilitation Counseling Bulletin*, 1981, 25, 110-123.

Craig, H.B. A sociometric investigation of the self-concept of the deaf child. *American Annals of the Deaf*, 1965, 110, 456-478.

Cupach, W.R. and Spitzberg, B.H. Trait versus state: A comparison of tendency-focused and event-focused measures of interpersonal communication competence. Paper presented at the Western Speech Communication Convention, Albuquerque, New Mexico, 1983.

Daly, J.A. Communication apprehension and behavior: Applying a multiple act criteria. *Human Communication Research*, 1978a, 4, 208-216.

Daly, J.A. The assessment of social-communication anxiety via self-reports: A comparison of measures. *Communication Monographs*, 1978b, 45, 204-218.

Daly, J.A. and Leth, S. Communication apprehension and the personnel selection decision. Paper presented at the International Communication Association convention, Portland, Oregon, 1976.

Daly, J.A. and McCroskey, J.C. Occupational choice and desirability as a function of communication apprehension. *Journal of Counseling Psychology*, 1975, 22, 309-313.

Davis, F. Deviance disavowel: The management of strained interaction by the visibly handicapped. *Social Problems*, 1961, 9, 120-132.

Derlaga, V.J., Wilson, M., and Chaikin, A.L. Friendship and disclosure reciprocity. *Journal of Personality and Social Psychology*, 1976, 34, 578-582.

Ekman, P., and Friesen, W.V. *Unmasking the face*. Englewood Cliffs, New Jersey: Prentice-Hall, 1975.

Erickson, J.G. and Omark, D.R. Social perceptions and communicative interactions of handicapped and normal children in a preschool classroom. *Instructional Science*, 1980, 9, 253-268.

Exline, R.V. Explorations in the process of person perception: Visual interaction in relation to competition, sex, and need for affiliation. *Journal of Personality*, 1963, 31, 1-20.

Exline, R.V., Gray, D. and Schuette, D. Visual behavior in a dyad as affected by interview content and sex of respondent. *Journal of Personality and Social Psychology*, 1965, 1, 201-209.

Farina, A. and Ring, K. The influence of perceived mental illness on interpersonal relations. *Journal of Abnormal Psychology*, 1965, 70, 47-51.

Farina, A., Holland, C. and Ring. K. The role of stigma and set in interpersonal interactions. *Journal of Abnormal Psychology*, 1966, 71, 421-428.

Farina, A., Sherman, M. and Allen, J.G. Role of physical abnormailities in interpersonal perception and behavior. *Journal of Abnormal Psychology*, 1968, 73, 590-593.

Fenton, R.J. and Hopf, T.S. Some effects of communication inhibition on small groups: Participation, member satisfaction, perceived effectiveness, credibility, and leadership. Paper presented at the Speech Communication Association convention, San Francisco, 1976.

Fenz, W.D. and Epstein, S. Approach avoidance conflict among a stimulus dimension by a thematic perception test. *Journal of Personality*, 1962, 30, 613-632.

Fisher, J.D., Rytting, M. and Heslin, R. Hands touching hands: Affective and evaluative effects of an interpersonal touch. *Sociometry*, 1976, 39, 416-421.

Fontes, N.E., Miller, G.R. and Kaminski, E.P. Communication barriers between handicapped and nonhandicapped interactants: Identification and removal. Unpublished manuscript, Department of Communication, Michigan State University, 1977.

Freimuth, V.S. The effects of communication apprehension on communication effectiveness. *Human Communication Research*, 1976, 2, 289-298.

Fremouw, W.J. and Harmatz, M.G. A helper model of behavioral treatment of speech anxiety. *Journal of Consulting and Clincial Psychology*, 1975, 43, 652-660.

Friederich, G.W. An empirical explication of a concept of self-reported speech anxiety. *Speech Monographs*, 1970, 37, 67-72.

Giffin, K. and Bradley, K. Group counseling for speech anxiety: An approach and a rationale. *Journal of Communication*, 1969, 19, 22-29.

Gilkinson, H. Social fears as reported by students in college speech classes. *Speech Monographs*, 1942, 9, 141-160.

Glaser, S.R. Back to basics: A case for adequate speech instruction for apprehensive communicators in the public schools. *OSCA Journal*, 1978, 33-37.

Glaser, S.R. The development and evaluation of a course in reticence management. Paper presented to the WSCA Conference, Los Angeles, 1979.

Glaser, S.R. Oral communication apprehension and avoidance: The current status of treatment research. *Communication Education*, 1981, 30, 321-341.

Glaser, S.R. Reticent Communication Course. University of Oregon, 1982.

Glaser, S.R., Biglan, A., and Dow, M.G. Conversational skills instruction for communication apprehension and avoidance: Evaluation of a treatment program. Paper presented to Speech Communication Association Convention, San Antonio, 1978.

Goffman, E. *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, New Jersey: Prentice-Hall, 1963.

Goffman, E. *Interaction ritual*. Garden City, New York: Anchor Books, 1967.

Goldberg, R.T. Toward an understanding of the rehabilitation of the disabled adolescent. *Rehabilitation Literature*, 1981, 42, 66-74.

Gresham, F.M. Social skills training with handicapped children: A review. *Review of Educational Research*, 1981, 51, 139-176.

Grove, T.G. Barriers to Communication Course. Portland State University, 1982.

Hall, E.T. *The silent language*. Garden City, New York: Doubleday, 1959.

Hall, E.T. A system for the notation of proxemic behavior. *American Anthropologist*, 1963, 65, 1003-1026.

Hall, E.T. *The hidden dimension*. Garden City, New York: Doubleday, 1966.

Hurt, [illegible] and Cook, J.A. The impact of communication-handicapped students on high-school teachers' expectancies, interaction anxiety and interpersonal perceptions in regular education classes. *Communication Quarterly*, 1979, 27, 38-46.

Hurt, H.T., Preiss, R., and Davis, B. The effects of communication apprehension of middle-school children on sociometric choice, affective, and cognitive learning. Paper presented at the International Communication Association convention, Portland, Oregon, 1976.

Hurt, H.T., Scott, M.D. and McCroskey, J.C. *Communication in the classroom*. Reading, Mass.: Addison-Wesley, 1978.

Ibrahim, F.A. and Herr, E.L. Modification of attitudes toward disability: Differential effect of two educational modes. *Rehabilitation Counseling Bulletin*, 1982, 26, 29-36.

Jablin, F.M. and Sussman, L. An exploration of communication and productivity in real brainstroming groups. *Human Communication Research*, 1978, 4, 329-337.

Jones, R.J. The hierarchical structure of attitudes toward the exceptional. *Exceptional Children*, 1974, 40, 430-435.

Jourard, S.M. *The transparent self*. New York: Van Nostrand Reinhold, 1971.

Kleck, R. Physical stigma and nonverbal cues emitted in face-to-face interaction. *Human Relations*, 1968, 21, 19-28.

Kleck, R. Physical stigma and task oriented interactions. *Human Relations*, 1969, 22, 53-60.

Kleck, R., Ono, H. and Hastorf, A.H. The effects of physical deviance upon face-to-face interaction. *Human Relations*, 1966, 19, 425-435.

Knapp, M.L. *Nonverbal communication in human interaction*. San Francisco: Holt, Rinehart and Winston, 1978.

Knapp, M.L. Interpersonal communication and human relationships. Boston: Allyn & Bacon, 1984.

Larson, C., Backlund, P., Redmond, M., and Barbour, A. *Assessing Functional Communication*, ERIC/SCA, 1978.

Lustig, M.W. The relationship between communicative dispositions and sound-silence patterns in triads. Paper presented at the convention of the Speech Communication Association, Washington, D.C., 1977.

Lustig, M.W. and Grove, T.G. Interaction analysis of small problem-solving groups containing reticent and non-reticent members. *Western Speech Communication*, 1975, 39, 155-164.

Lustig, M.W. and King, S.W. The effect of communication apprehension and situation on communication strategy choices. *Human Communication Research*, 1980, 7, 74-82.

MacKenzie, D., Marquardt, P. and Werkman, D. Nonverbal behavior toward the visibly handicapped. Unpublished manuscript, Department of Speech Communication, Portland State University, 1981.

Mahl, G.F. Measuring the patient's anxiety during interviews from "expressive" aspects of his speech. *Transactions, New York Academy of Science, Series II*. 1959, 21, 249-257.

McCroskey, J.C. The implementation of a large scale program of systematic desensitization for communication apprehension. *Speech Teacher*, 1972, 21, 255-264.

McCroskey, J.C. The effects of communication apprehension on nonverbal behavior. *Communication Quarterly*, 1976, 24, 39-44.

McCroskey, J.C. Oral communication apprehension: A summary of recent theory and research. *Human Communication Research*, 1977, 4, 68-96.

McCroskey, J.C. On communication competence and communication apprehension: A response to Page. *Communication Education*, 1980, 29, 109-111.

McCroskey, J.C. Communication competence and performance: A research and pedagogical perspective. *Communication Education*, 1982, 31, 1-8.

McCroskey, J.C. and Andersen, J.F. The relationship between communication apprehension and academic achievement among college students. *Human Communication Research*, 1976, 3, 73-81.

McCroskey, J.C. and Daly, J.A. Teachers' expectations of the communication apprehensive child in the elementary school. *Human Communication Research*, 1976, 3, 67-72.

McCroskey, J.C. and Richmond, V.P. The effects of communication on the perception of peers. *Western Speech Communication*, 1976, 40, 14-21.

McCroskey, J.C. and Sheahan, M.E. Communication apprehension, social preference, and social behavior. *Communication Quarterly*, 1978, 26, 41-45.

McCroskey, J.C., Daly, J.A., Richmond, V.P. and Falcione, R.L. Studies on the relationship between communication apprehension and self-esteem. *Human Communication Research*, 1977, 3, 269-277.

Means, R., and Akridge, R.L. Psychological and behavioral adjustment: A model of healthy personing. *Journal of Rehabilitation*, 1978, 44, 24-29.

Mehrabian, A. *Nonverbal communication*. Chicago, Illinois: Aldine-Atherton, 1972.

Lustig, M.W. and King, S.W. The effect of communication apprehension and situation on communication strategy choices. *Human Communication Research*, 1980, 7, 74-82.

MacKenzie, D., Marquardt, P. and Werkman, D. Nonverbal behavior toward the visibly handicapped. Unpublished manuscript, Department of Speech Communication, Portland State University, 1981.

Mahl, G.F. Measuring the patient's anxiety during interviews from "expressive" aspects of his speech. *Transactions, New York Academy of Science, Series II*. 1959, 21, 249-257.

McCroskey, J.C. The implementation of a large scale program of systematic desensitization for communication apprehension. *Speech Teacher*, 1972, 21, 255-264.

McCroskey, J.C. The effects of communication apprehension on nonverbal behavior. *Communication Quarterly*, 1976, 24, 39-44.

McCroskey, J.C. Oral communication apprehension: A summary of recent theory and research. *Human Communication Research*, 1977, 4, 68-96.

McCroskey, J.C. On communication competence and communication apprehension: A response to Page. *Communication Education*, 1980, 29, 109-111.

McCroskey, J.C. Communication competence and performance: A research and pedagogical perspective. *Communication Education*, 1982, 31, 1-8.

McCroskey, J.C. and Andersen, J.F. The relationship between communication apprehension and academic achievement among college students. *Human Communication Research*, 1976, 3, 73-81.

McCroskey, J.C. and Daly, J.A. Teachers' expectations of the communication apprehensive child in the elementary school. *Human Communication Research*, 1976, 3, 67-72.

McCroskey, J.C. and Richmond, V.P. The effects of communication on the perception of peers. *Western Speech Communication*, 1976, 40, 14-21.

McCroskey, J.C. and Sheahan, M.E. Communication apprehension, social preference, and social behavior. *Communication Quarterly*, 1978, 26, 41-45.

McCroskey, J.C., Daly, J.A., Richmond, V.P. and Falcione, R.L. Studies on the relationship between communication apprehension and self-esteem. *Human Communication Research*, 1977, 3, 269-277.

Means, R., and Akridge, R.L. Psychological and behavioral adjustment: A model of healthy personing. *Journal of Rehabilitation*, 1978, 44, 24-29.

Mehrabian, A. *Nonverbal communication*. Chicago, Illinois: Aldine-Atherton, 1972.

Mehrabian, A. Nonverbal communication. In C.D. Mortensen and K.K. Sereno (Eds.), *Advances in communication research*. New York: Harper and Row, 1973.

Meissner, A.L., Thoreson, R.W., and Butler, A.J. Relation of self-concept to impact and obviousness of disability among male and female adolescents. *Perceptual and Motor Skills*, 1967, 24, 1099-1105.

Miller, G.R. and Burgoon, J.K. Factors affecting assessments of witness credibility. In (Ed.) *The psychology of the courtroom* (pp. 169-194). Academic Press, 1982.

Miller, G.R. and Hewgill, M.A. The effect of variations in nonfluency on audience ratings of source credibility. *Quarterly Journal of Speech*, 1964, 50, 36-44.

Morgan, S.R. A descriptive analysis of maladjusted behavior in socially rejected children. *Behavioral Disorders*, 1977, 3, 23-30.

Murray, D.C. Talk, silence, and anxiety. *Psychological Bulletin*, 1971, 75, 244-260.

Pearce, W.B. Trust in interpersonal communication. *Speech Monographs*, 1974, 41, 236-244.

Phillips, G.M. Reticence: Pathology of the normal speaker. *Speech Monographs*, 1968, 35, 39-49.

Phillips, G.M. Rhetoritherapy versus the medical model: Dealing with reticence. *Communication Education*, 1977, 26, 34-43.

Phillips, G.M. and Metzger, N. The reticent syndrome: Some theoretical considerations about etiology and treatment. *Speech Monographs*, 1973, 40, 220-230.

Porter, D.T. Communication apprehension: Communication's latest artifact. In D. Nimmo (Ed.), *Communication yearbook 3*, (pp. 241-259). New Brunswick: Transaction Books, 1979.

Porter, D.T. An empirical appraisal of the PRCA for measuring oral communication apprehension. *Human Communication Research*, 1981, 8, 58-71.

Porter, D.T. Communicator style perceptions as a function of communication apprehension. *Communication Quarterly*, 1982, 30, 237-244.

Powers, W.G. The rhetorical interrogative: Anxiety or control? *Human Communication Research*, 1977, 4, 44-47.

Quiggins, J.G. Effects of high and low communication apprehension on small group member source credibility and interpersonal attraction. Paper presented at the Speech Communication Association convention, San Francisco, 1976.

Richardson, S.A. Age and sex differences in values toward physical handicaps. *Journal of Health and Social Behavior*, 1970, 11, 253-258.

Richardson, S.A., Hastorf, A.H., Goodman, N. and Dornbusch, SM.. Cultural uniformity in reaction to physical disabilities. *American Sociological Review*, 1961, 26, 241-247.

Richmond, V.P. Communication apprehension and success in the job applicant screening process. Paper presented at the International Communication Association convention, Berlin, 1977.

Rosenfeld, L.B. Self-disclosure avoidance: Why I am afraid to tell you who I am. *Communication Monographs*, 1979, 46, 63-74.

Rosenfeld, L.B. and Plax, T.G. Personality discriminants of reticence. *Western Journal of Speech Communication*, 1976, 40, 22-31.

Russell, R.A. Concepts of adjustment to disability: An overview. *Rehabilitation Literature*, 1981, 42, 330-338.

Saine, T.J., Levine, M.A., and McHose, G.E. Assessing the structure of nonverbal interaction. *Southern Speech Communication Journal*, 1975, 40, 275-287.

Scott, M.D. and Wheeless, L.R. An exploratory investigation of three types of communication apprehension on student achievement. Paper presented at the Speech Communication Association convention, San Francisco, 1976.

Scott, M.D., McCroskey, J.C. and Sheahan, M.E. Measuring communication apprehension. *Journal of Communication*, 1978, 28, 104-111.

Shanker, A. Problems and Prospects of PL 94-142. *Yearbook of special education 1980-1981*. Chicago, Illinois: Marquis Academic Media, 1980.

Siegfried, W.D. and Toner, I.J. Students' attitudes toward physical disability in prospective co-workers and supervisors. *Rehabilitation Counseling Bulletin*, 1981, 25, 20-25.

Siegman, A.W. The telltale voice: Nonverbal messages of verbal communication. In A.W. Siegman & S. Feldstein (Eds.), *Nonverbal behavior and communication* (pp. 183-238), New York: John Wiley and Sons, 1978.

Siegman, A.W. and Pope, B. The effects of ambiguity and anxiety of interviewer behavior. In A. W. Siegman & B. Pope (Eds.), *Studies in dyadic communication*. (pp. 29-68). New York: Pergamon Press, 1972.

Siller, J., Chipman, A., Ferguson, L. and Vann, D.H. *Attitudes of the nondisabled toward the physically disabled*. New York: New York University School of Education, 1967.

Sorensen, G.A. and McCroskey, J.C. The prediction of interaction behavior in small groups. *Communication Monographs*, 1977, 44, 73-80.

Spitzberg, B.H. Competence in communicating: A taxonomy, review, critique and predictive model. Paper presented at the Speech Communication Association Convention, Anaheim, California, 1981.

Spitzberg, B.H. Communication competence as knowledge, skill, and impression. *Communication Education*, 1983, 32, 323-329.

Thomas, J. How to combat shyness. *Old Oregon*, 1978.

Thompson, T. The impact of a physical handicap on communication characteristics of the marital dyad. *Western Journal of Speech Communication*, 1981a, 45, 227-240.

Thompson, T. The development of communication skills in physically handicapped children. *Human Communication Research*, 1981b, 7, 312-324.

Thompson, T. Communication with the handicapped: A three year study of the effectiveness of mainstreaming. *Communication Education*, 1983, 32, 185-195.

Thompson, T. and Seibold, D.R. Stigma management in *normal*-stigmatized interactions: Test of the disclosure hypothesis and a model of stigma acceptance. *Human Communication Research*, 1978, 4, 231-242.

Titley, R.W. Imaginations about the disabled. *Social Science and Medicine*, 1969, 3, 29-38.

Watson, D. and Friend, D. Measurement of social-evaluative anxiety. *Journal of Consulting and Clinical Psychology*, 1969, 33, 448-457.

Watzlawick, P., Beavin, J., and Jackson, D. Some tentative axioms of communication. In C.D. Mortensen (Ed.), *Basic readings in communication theory*. San Francisco: Harper and Row, 1973.

Weinberg, N. Modifying social stereotypes of the physically disabled. *Rehabilitation Counseling Bulletin*, 1978, 22, 115-123.

Weissburg, M. and Lamb, D. Comparative effects of cognitive modification, systematic desensitization and speech preparation in the reduction of speech and general anxiety. *Communication Monographs*, 1977, 44, 27-35.

Wells, J. and Lashbrook, W.B. A study of the effects of systematic desensitization on the communicative anxiety of individuals in small groups. Paper presented at the Speech Communication Association convention, New Orleans, 1970.

Wheeless, L.R. A follow-up study of the relationship among trust, disclosure, and interpersonal solidarity. *Human Communication Research*, 1978, 4, 143-157.

Wiemann, J.M. Explication and test of a model of communication competence. *Human Communication Research*, 1977, 3, 195-213.

Worthy, M., Garry, A.L. and Kahn, G.H. Self-disclosure as an exchange process. *Journal of Personality and Social Psychology*, 1969, 13, 59-63.

Wright, B.A. *Physical disability: A psychological approach*. New York: Harper and Row, 1960.

Yuker, H.E., Block, J.R. and Campbell, W.H. *A scale to measure attitudes toward disabled persons*. New York: Human Resources Study, 1966, #7.

Zimbardo, P.G. *Shyness*. Reading, Mass.: Addison-Wesley, 1977.

Zimbardo, P.G. and Ebbesen, E.B. Experimental modification of relationship between effort, attitude and behavior. *Journal of Personality and Social Psychology*, 1970, 16, 207-213.